## **Claim Listing**

- 1. (previously presented) A method, including steps of adjusting an aspect ratio of a display screen in response to a remote database, the database including information associating aspect ratio information with media streams.
- 2. (original) A method as in claim 1, wherein said aspect ratio is further adjusted in response to an on-screen display, said on-screen display indicating placement for some combination of masks and sidebars.
  - 3. (original) A method as in claim 1, including steps of adjusting the aspect ratio in response to input from a viewer; and sending the adjusted aspect ratio to the database.
- 4. (original) A method as in claim 1, wherein the information associating aspect ratio information includes

a preselected aspect ratio; and an adjustment from a known aspect ratio.

- 5. (original) A method as in claim 1, wherein the steps of adjusting include automatically controlling one or more masks.
- 6. (original) A method, including steps of

  presenting a media stream having a first aspect ratio R1 using a display screen
  having a second aspect ratio R2;

receiving information from a source external to the media stream, that information relating to R1; and

adjusting R2 in response to that information.

- 7. (original) A method as in claim 6, wherein the steps of adjusting R2 include automatically moving masking.
- 8. (original) A method as in claim 6, including steps of contracting the display screen when the media stream includes a picture having a third aspect ratio R<sub>3</sub>, with R<sub>3</sub> < R<sub>1</sub>.
- 9. (original) A method as in claim 6, including steps of expanding the display screen when the media stream includes a picture having a third aspect ratio R3, with R3 > R1.
  - 10. (original) A method, including steps of

recognizing a media stream with a first aspect ratio and user-interested viewable portion R embedded in a media stream having a second aspect ratio S, where S > R, whereby presentation of the media stream can be expanded to a relatively larger region of a display screen; and

presenting the media stream in that relatively larger region.

- 11. (original) A method as in claim 10, wherein a technique for embedding the first aspect ratio R includes letterboxing.
- 12. (original) A method as in claim 10, wherein the first aspect ratio R is a known television standard.
- 13. (original) A method as in claim 10, wherein the second aspect ratio S is a known movie standard.
  - 14. (previously presented) A method, including steps of

recognizing an element to be presented within a media stream; and adjusting a target location for said element in response to an aspect ratio of that media stream.

15. (previously presented) A method as in claim 14, wherein those steps of adjusting include

adjusting masking of the display screen in response to said element and the media stream; and

positioning the element in an effective display region not blocked by masking.

16. (original) A method as in claim 14, wherein said steps of adjusting include

adjusting the aspect ratio in response to said element and the media stream; and positioning the element in an effective display region not blocking any substantial portion of the media stream.

- 17. (original) A method as in claim 14, wherein said steps of adjusting include positioning the target location in an effective display region not blocked by masking.
- 18. (original) A method as in claim 14, wherein said steps of adjusting include positioning the target location in an effective display region not blocking any substantial portion of the media stream.
- 19. (original) A method as in claim 14, wherein that element includes at least one of: a caption, a closed-caption, a subtitle, a translation, a ticker feed.
- 20. (original) A method as in claim 1, wherein said steps of adjusting are responsive to a correlation between values in said database and DVD hash values.

- 21. (previously presented) A method, including steps of positioning some combination of masks and sidebars without regard for the aspect ratio of the media presentation, said positioning using absolute positional data values.
- 22. (original) A method as in claim 21, wherein said steps of positioning include compensation for projector overscan.
- 23. (original) A method for adjusting the aspect ratio of a display including steps of

identifying a media stream to be presented;

querying a database for metadata associated with said media stream;

parsing said metadata, said steps of parsing yielding one or more informational

components;

interpreting at least one of said informational components; and moving one or more display masks in response to said steps of interpreting, said

display masks being capable of obscuring and revealing some portion of said display.

- 24. (original) A method of claim 23, wherein said display masks include one or more physical objects.
- 25. (original) A method of claim 23, wherein said display mask includes an area of displayed light, said light of at least one hue determined to reduce screen burn-in at a transition boundary between an adjacently displayed image stream.
- 26. (original) A method as in claim 23, wherein said steps of identifying include reading at least one DVD hash value, whereby a particular media stream is identified by computing said hash value as a part of said media stream and using said hash value as a key for said first database.

27. (previously presented) A method as in claim 23, wherein

said steps of identifying include interpreting said metadata before beginning presentation of said media stream at a bookmark; and

said steps of moving include moving said display masks before beginning presentation of said media stream at a bookmark.

28. (previously presented) A method as in claim 23, wherein

said steps of identifying include interpreting said metadata in response to watchpoints in said media streams; and

said steps of moving are performed in response to decisions made at those watchpoints.

- 29. (previously presented) A method as in claim 23, wherein said metadata includes some combination of: an aspect ratio, audio encoding specification, other device control information.
  - 30. (original) Apparatus including

a database including information associating aspect ratio information with media streams;

memory or mass storage capable of receiving that information in response to one of those media streams; and

- a masking controller capable of adjusting an aspect ratio of a display screen in response to information in that memory or mass storage.
- 31. (previously presented) The apparatus of claim 30, wherein said aspect ratio information is adjusted by an input from a viewer.
- 32. (original) The apparatus of claim 30, wherein the information associating aspect ratio information includes

a pre-selected aspect ratio; and an adjustment from a known aspect ratio.

- 33. (original) The apparatus of claim 30, wherein said steps of adjusting include automatically controlling the position of one or more masks or sidebars.
- 34. (original) A method of doing business, including steps of providing access to information associating aspect ratio information with media streams; and

collecting a fee in response to those steps of providing access.

- 35. (original) A method of claim 34, wherein said information associating aspect ratio information with media streams includes data for controlling some combination of a set of masks and a set of sidebars, said set of masks and set of sidebars adjusting the aspect ratio of the viewable portion of a display screen.
- 36. (original) A physical medium including information readable by a computing device, the information including
- a first media stream having a first aspect ratio R1, having been produced in response to a second media stream having a second aspect ratio R2, wherein

 $R_1 > R_2$ ;

the first media stream is relatively larger than the second media stream; and the first media stream does not include letterboxing.

37. (original) A method, including steps of adjusting the active area of a display in response to a remote first database, said first database including information associating media streams with some combination of aspect ratio information, horizontal size information, vertical size information, resolution, anamorphic compression, and letterboxing.

- 38. (original) A method as in claim 37, wherein said active area of said display is a reflective portion of said display visible to the human viewer.
- 39. (original) A method as in claim 37, wherein said active area of said display is an illuminated portion of said display visible to a human viewer.
- 40. (original) A method as in claim 37, wherein said active area may be further adjusted in response to an onscreen display, said on-screen display indicating placement for some combination of masks and sidebars.
- 41. (previously presented) A method as in claim 37, wherein said information in said first database indicates a portion of a video frame occupied by a desired picture, wherein an active area of the display is adjusted to present the desired picture and exclude a remainder of the video frame.
- 42. (previously presented) A method as in claim 37, wherein said information in said first database indicates a portion of a video frame occupied by a desired picture, whereby the active area of the display is adjusted by enlarging a projected image of said desired picture such that the active area contains the desired picture while excluding at least some portion of the video frame.
- 43. (original) A method as in claim 42, wherein said information in said first database indicates that at least one video frame is letterboxed.
- 44. (original) A method as in claim 37, including steps of identifying a particular media stream by computing a hash of a part of the media stream and using said hash as a key with said first database.

- 45. (previously presented) A method as in claim 37, wherein said steps of adjusting are also responsive to a logically local second database.
- 46. (original) A method as in claim 45, wherein said second database includes information associating potentially active areas of said display with information in said first database.
- 47. (original) A method as in claim 45, wherein said second database includes information associating potentially active areas of said display with at least one media stream, said information originally obtained dynamically during playback of said at least one media stream.
- 48. (original) A method as in claim 45, wherein said second database includes information related to projector overscan.
- 49. (previously presented) A method as in claim 45, wherein information in said second database may be further adjusted in response to an on-screen display and input from a human viewer.
- 50. (original) A method as in claim 49, wherein said on-screen display indicates placement for some combination of masks and sidebars.
- 51. (original) A method, including steps of selecting a target location on a display for each of a first and a second element of a video stream in response to a remote first database, said first database including information associating each of the first and the second element of the media stream with some independent combination of aspect ratio, horizontal size, vertical size, resolution, anamorphic compression, and letterboxing.

- 52. (original) A method as in claim 51, including steps of adjusting an active area of said display in response to said target locations.
- 53. (original) A method as in claim 52, wherein said active area is adjusted using some combination of masks and sidebars.
- 54. (original) A method as in claim 52, wherein said first element includes a motion picture and said second element includes some combination of a caption, a closed-caption, a subtitle, a translation, a ticker feed.
- 55. (original) A method as in claim 37, wherein said steps of adjusting are responsive to a portion of the media stream being viewed.
- 56. (original) A method as in claim 37, wherein said steps of adjusting are responsive to the triggering of one or more watchpoints.
- 57. (original) A method for adjusting the aspect ratio of a display, the method including steps of

determining, from a media stream to be presented, the aspect ratio of said media stream;

calculating at least one informational component in response to said steps of determining;

moving one or more display masks in response to said steps of calculating, said display masks being capable of obscuring and revealing some portion of said display.

58. (original) Apparatus as in claim 30, wherein said database includes information associating, with at least one media stream, some combination of at least one of aspect ratio information, horizontal size information, vertical size information, resolution, anamorphic compression, and letterboxing.

- 59. (original) The apparatus of claim 58, wherein said controller instructs movement of some combination of masks and sidebars, said masks and sidebars being capable of adjusting the active area of a display screen.
- 60. (original) A method of doing business as in claim 34, wherein the steps of providing access include providing access to a database, the database including at least some information associating, with at least one media stream, some combination of at least one of aspect ratio information, horizontal size information, vertical size information, resolution, anamorphic compression, and letterboxing.
- 61. (original) A method as in claim 60, wherein said information includes data for controlling some combination of masks and sidebars, said masks and sidebars being capable of adjusting the active area of a display screen.
- 62. (original) A method as in claim 1, wherein said steps of adjusting include blanking an inactive area of said display with a color that minimizes burn-in when displayed.
- 63. (previously presented) A method, including steps of automatically determining an aspect ratio of a media stream; and adjusting an aspect ratio of a display screen in response to said steps of automatically determining.
  - 64. (previously presented) Apparatus including

means for adjusting an aspect ratio of a display screen in response to a remote database, the database including information associating aspect ratio information with media streams.

- 65. (original) Apparatus as in claim 64, wherein said aspect ratio is further adjusted in response to an on-screen display, said on-screen display indicating placement for some combination of masks and sidebars.
  - 66. (original) Apparatus as in claim 64, including means for adjusting the aspect ratio in response to an input from a viewer; and means for sending that input to the database.
- 67. (original) Apparatus as in claim 64, wherein the information associating aspect ratio information includes

a preselected aspect ratio; and an adjustment from a known aspect ratio.

- 68. (original) Apparatus as in claim 64, wherein said means for adjusting includes automatically controlling one or more masks.
  - 69. (original) Apparatus, including

means for presenting a media stream having a first aspect ratio R1 using a display screen having a second aspect ratio R2;

means for receiving information from a source external to the media stream, that information relating to R1; and

means for adjusting R2 in response to that information.

- 70. (original) Apparatus as in claim 69, wherein said means for adjusting R2 includes automatically moving masking.
- 71. (original) Apparatus as in claim 69, including means for contracting the display screen when the media stream includes a picture having a third aspect ratio R3, with R3 < R1.

72. (original) Apparatus as in claim 69, including means for expanding the display screen when the media stream includes a picture having a third aspect ratio R3, with R3 > R1.

## 73. (original) Apparatus, including

means for recognizing a media stream with a first aspect ratio R and userinterested viewable portion embedded in that media stream having a aspect ratio S not equal to R, whereby presentation of the media stream can be expanded to a relatively larger region of a display screen; and

means for presenting the media stream in that relatively larger region.

- 74. (original) Apparatus as in claim 73, wherein the means for presenting includes letterboxing.
- 75. (original) Apparatus as in claim 73, wherein the first aspect ratio R includes a known television standard.
- 76. (original) Apparatus as in claim 73, wherein the second aspect ratio S includes a known movie standard.
  - 77. (previously presented) Apparatus, including

means for recognizing a first element to be presented within a media stream, said element having a different aspect ratio from a second element in said media stream; and

means for adjusting a target location for said first element, in response to an aspect ratio of that second element.

78. (previously presented) Apparatus as in claim 77, wherein said means for adjusting includes

means for adjusting masking of a display screen in response to said first element and said second element; and

means for positioning the first element in an effective display region not blocked by masking.

79. (original) Apparatus as in claim 77, wherein said means for adjusting includes

means for adjusting masking of the display screen in response to said first element and said second element; and

means for positioning the first element in an effective display region not overlapping any substantial portion of the second element.

- 80. (original) Apparatus as in claim 77, wherein said means for adjusting includes means for positioning the target location in an effective display region not blocked by masking.
- 81. (original) Apparatus as in claim 77, wherein said means for adjusting includes means for positioning the target location in an effective display region not overlapping any substantial portion of the media stream.
- 82. (original) Apparatus as in claim 77, wherein that element includes at least one of: a caption, a closed-caption, a subtitle, a translation, a ticker feed.
- 83. (original) Apparatus as in claim 64, wherein said means for adjusting is responsive to a correlation between values in said database and DVD hash values.
  - 84. (previously presented) Apparatus, including

means for automatically positioning some combination of masks and sidebars associated with a media presentation display screen, without substantial regard for the aspect

ratio of the media presentation, said positioning using substantially absolute positional data values associated with said media presentation.

- 85. (original) Apparatus as in claim 84, wherein said means for positioning includes compensation for projector overscan.
- 86. (original) Apparatus for adjusting the aspect ratio of a display including means for identifying a media stream to be presented;

  means for querying a database for metadata associated with said media stream;

  means for parsing said metadata, said parsing yielding one or more informational components;

means for interpreting at least one of said informational components; and
means for moving one or more display masks in response to said interpreting,
said display masks being capable of obscuring and revealing some portion of said display.

- 87. (original) Apparatus as in claim 86, wherein said means for identifying includes reading at least one DVD hash value, whereby a particular media stream is identified by computing said hash value as a part of said media stream and using said hash value as a key for said first database.
- 88. (previously presented) A method as in claim 23, wherein said means for identifying include means for interpreting said metadata in response to watchpoints in said media streams; and

said means for moving are performed in response to decisions made at those watchpoints.

89. (previously presented) Apparatus as in claim 86, wherein said means for identifying includes identifying media streams at watchpoints.

- 90. (original) Apparatus of claim 86, wherein said metadata includes some combination of: an aspect ratio, audio encoding specification, other device control information.
- 91. (original) Apparatus including means for adjusting the active area of a display in response to a remote first database, said first database including information associating media streams with some combination of aspect ratio information, horizontal size information, vertical size information, resolution, anamorphic compression, and letterboxing.
- 92. (original) Apparatus as in claim 91, wherein said active area of said display is a reflective portion of said display visible to the human viewer.
- 93. (original) Apparatus as in claim 91, wherein said active area of said display is an illuminated portion of said display visible to a human viewer.
- 94. (original) Apparatus as in claim 91, wherein said active area may be further adjusted in response to an onscreen display, said on-screen display indicating placement for some combination of masks and sidebars.
- 95. (previously presented) Apparatus as in claim 91, wherein said information in said first database indicates a portion of a video frame occupied by a desired picture, wherein an active area of the display is adjusted to present the desired picture and exclude a remainder of the video frame.
- 96. (previously presented) Apparatus as in claim 91, wherein said information in said first database indicates a portion of a video frame occupied by a desired picture, whereby the active area of the display is adjusted by enlarging a projected image of said desired picture such that the active area contains the desired picture while excluding at least some portion of the video frame.

- 97. (previously presented) Apparatus as in claim 96, wherein said information in said first database indicates that at least one video frame is letterboxed.
- 98. (original) Apparatus as in claim 91 including means for identifying a particular media stream by computing a hash of a part of the media stream and using said hash as a key with said first database.
- 99. (original) Apparatus as in claim 91, wherein said means for adjusting are also responsive to a logically local second database.
- 100. (original) Apparatus as in claim 99, wherein said second database includes information associating potentially active areas of said display with information in said first database.
- 101 (original) Apparatus as in claim 99, wherein said second database includes information associating potentially active areas of said display with at least one media stream, said information originally obtained dynamically during playback of said at least one media stream.
- 102. (original) Apparatus as in claim 99, wherein said second database includes information related to projector overscan.
- 103. (original) Apparatus as in claim 99, wherein information in said second database may be further adjusted in response to an on-screen display and input from a human viewer.
- 104. (original) Apparatus as in claim 103, wherein said on-screen display indicates placement for some combination of masks and sidebars.

- display for each of a first and a second element of a video stream in response to a remote first database, said first database including information associating each of the first and the second element of the media stream with some independent combination of aspect ratio, horizontal size, vertical size, resolution, anamorphic compression, and letterboxing.
- 106. (original) Apparatus as in claim 105, including means for adjusting an active area of said display in response to said target location.
- 107. (original) Apparatus as in claim 106, wherein said active area is adjusted using some combination of masks and sidebars.
- 108. (original) Apparatus as in claim 105, wherein said second element includes a motion picture and said first element includes some combination of a caption, a closed-caption, a subtitle, a translation, a ticker feed.
- 109. (original) Apparatus as in claim 91, wherein said means for adjusting are also responsive to at least a portion of the media stream being viewed.
- 110. (original) Apparatus as in claim 91, wherein said means for adjusting are also responsive to triggering of one or more watchpoints.
- 111. (original) Apparatus as in claim 64, said means for adjusting including means for blanking an inactive area of said display with a color that minimizes burn-in when displayed.
  - 112. (previously presented) Apparatus including
    means for automatically determining an aspect ratio of a media stream; and

means for adjusting an aspect ratio of a display screen in response to said means for automatically determining.

- 113. (original) A physical medium including information readable by a computing device, the information signal incorporating set of metadata associated with a media stream.
- 114. (original) A physical medium as in claim 113, wherein the metadata includes instructions interpretable by a viewer device.
- 115. (original) A physical medium as in claim 114, wherein the viewer device includes at least one of the following: a mask controller, one or more lights, one or more fans, one or more audio systems, one or more heating systems, one or more cooling systems.
- 116. (original) A physical medium as in claim 113, wherein the metadata is updateable.
- 117. (original) A physical medium as in claim 116, wherein the update is responsive to one or more user inputs.
- 118. (original) A physical medium as in claim 113, wherein the metadata is generated, at least in part, in response to the media stream.
- 119. (original) A physical medium as in claim 118, wherein the metadata includes at least one aspect ratio associated with the media stream.
  - 120. (original) A physical medium as in claim 113, including information describing a request identifying the media stream;

wherein the metadata includes at least one aspect ratio associated with the media stream.

121. (original) An information signal as in claim 113, including information describing a response including at least some of the metdata; wherein the metadata includes at least one aspect ratio associated with the media stream.

122. (original) A physical medium including information readable by a computing device, the information including

a set of displayable reference rectangles; the rectangles each predisposed to an aspect ratio; and the aspect ratio being selectable by an operator.

123. (original) A physical medium including information readable by a computing device, the information signal including

one or more mask values, having been produced in response to the manual positioning of one or more masks;

one or more sidebar values, having been produced in response to the manual positioning of one or more sidebars; and

a combination of said mask values and said sidebar values generating an aspect ratio.

124. (original) Apparatus including

means for generating positional data for a set of masks and sidebars, said means for generating responsive to manual positioning of said set of masks and sidebars by an operator; means for calculating an aspect ratio from said positional data; and means for storing said positional data in a database.

125.

means for generating a request, said request indicating a media stream;

means for transmitting said request from a first server to a second server; and

means for identifying at least one media stream and at least one set of metadata

associated with said request, said metadata including at least one set of aspect ratio information.

126. (original) Apparatus as in claim 125, including

(original) Apparatus including

means for generating a response in answer to said request, said response including at least one set of aspect ratio information;

means for transmitting said response from said second server to said first server;

means for parsing said response, said parsing extracting said at least one set of aspect ratio information from said response;

means for interpreting said aspect ratio information at a mask controller; and means for moving a set of masks responsive to said interpreting.

127. (original) Apparatus including

means for analyzing a media stream, said analyzing generating positional data indicating a user-interested viewable portion and a user-uninterested viewable portion; and means for placement of a set of masks responsive to said positional data, said placement obscuring said user-uninterested viewable portion.

- 128. (original) A method as in claim 29, wherein a portion of said metadata is used to control one or more lights.
- 129. (original) A method as in claim 29, wherein a portion of said metadata is used to control one or more cooling systems.
- 130. (original) A method as in claim 29, wherein a portion of said metadata is used to control one or more audio systems.

- 131. (original) Apparatus as in claim 90, wherein a portion of said metadata is used to control one or more lights.
- 132. (original) Apparatus as in claim 90, wherein a portion of said metadata is used to control one or more cooling systems.
- 133. (original) Apparatus as in claim 90, wherein a portion of said metadata is used to control one or more audio systems.
- 134. (new) A method as in claim 6, including steps of maximizing usage of the display screen in response to presence in the media stream of a picture having an aspect ratio R3, with R3 not equal to R1.
- 135. (new) A method as in claim 10, including steps of sending information describing that relatively larger region to the database.
  - 136. (new) A method, including steps of

recognizing a media stream with a first aspect ratio and user-interested viewable portion R embedded in a media stream having a second aspect ratio S not equal to R, whereby presentation of the media stream can be expanded to a relatively larger region of a display screen; and

presenting the media stream in that relatively larger region.

- 137. (new) A method as in claim 136, including steps of sending information describing that relatively larger region to the database.
  - 138. (new) A method, including steps of

recognizing an element to be presented within a media stream, said element having a different aspect ratio from said media steam; and

adjusting a target location for said element in response to an aspect ratio of that media stream.

- 139. (new) A method as in claim 138, including steps of sending information describing that adjusted target location to the database.
- 140. (new) A method as in claim 21, including steps of determining those absolute positional data values in response to a remote database.
- 141. (new) A method as in claim 28, including steps of prefetching said metadata before making decisions at those watchpoints.
- 142. (new) A method as in claim 28, including steps of predicting results of decisions at those watchpoints.
  - 143. (new) Apparatus as in claim 30, including
- a communication channel coupled to that masking controller and to that database, and capable of sending information describing that adjusted aspect ratio to the database.
- 144. (new) Apparatus as in claim 69, including means for maximizing usage of the display screen in response to presence in the media stream of a picture having an aspect ratio R3, with R3 not equal to R1.
- 145. (new) Apparatus as in claim 84, including means for determining said values in response to a remote database.

- 146. (new) A method as in claim 88, including steps of prefetching said metadata before making decisions at those watchpoints.
- 147. (new) A method as in claim 88, including steps of predicting results of decisions at those watchpoints.